What Is Claimed Is:

1. A method of rapidly assessing population with a spatially-stratified random sample, the method comprising:

creating a systematic grid on a study area, the systematic grid being defined by a given number of target grid points so as to form grid cells;

dividing each one of the grid cells into a series of sub-grid cells, each one of the series of sub-grid cells being identified from left to right and from bottom to top within each one of the grid cells;

identifying each one of the sub-grid cells that intersect the study area;

listing each one of the sub-grid cells that intersect the study area, the list of sub-grid cells being sequences in the same order as the grid cells and the sub-grid cells;

dividing the sub-grid list into a given number of sections, each of the given number of sections being configured to have substantially equal numbers of sub-grid cells, and the given number of sections being equal to the given number of targeted grid points; and

selecting a random sub-grid cell from each section of sub-grid cells so as to obtain the spatially-stratified random sample.

2. A method according to claim 1 wherein the selected random sub-grid cell from each section of sub-grid cells is utilized so as to define random sampling locations for population survey and computation.

3. A method according to claim 2 wherein the random sampling locations for population survey and computation maximizes the equality of possible spatial sampling location selection.

4. A method according to claim 1 further comprising the step of providing an inner buffer polygon within an outer boundary of the study area so as to avoid creating unusable sampling points.

5. A method according to claim 1 further comprising the step of providing an exclusive area polygon to define an unwanted sampling area within the study area.

6. A method according to claim 1 further comprising the step of providing a cluster area polygon to define a separate frequency sampling from the study area so as to enable complex population cluster sampling.

7. A method according to claim 1 wherein the study area is a polygon.

8. A method according to claim 7 wherein the study area polygon is formed using data entered by a user.

9. A method according to claim 8 wherein the data entered by the user is a list of coordinates.

10. A method according to claim 8 wherein the data entered by the user comprises entries made on a map by the user and further wherein the data comprises digitization of the entries made on the map.

11. A method according to claim 7 wherein the study area polygon is formed using collected data.

12. A method according to claim 1 wherein the steps are programmed in Java.

13. A system for rapidly assessing population with a spatially-stratified random sample, the system comprising:

a systematic grid created on a study area, the systematic grid being defined by a given number of target grid points so as to form grid cells;

first division means for dividing each one of the grid cells into a series of sub-grid cells, each one of the series of sub-grid cells being identified from left to right and bottom to top within each one of the grid cells;

identification means for identifying each one of the sub-grid cells that intersect the study area;

a list generator for listing each one of the sub-grid cells that intersect the study area, the list of sub-grid cells being sequenced in order of the grid cells and the sub-grid cells;

second division means for dividing the sub-grid list into a given number of sections, each of the given number of sections being configured to have a substantially equal number of sub-grid cells, and the given number of sections being equal to the given number of targeted grid points; and

selection means for selecting a random sub-grid cell from each section of sub-grid cells so as to obtain the spatially-stratified random sample.

14. A system according to claim 13 further comprising an inner buffer polygon within an outer boundary of the study area so as to avoid creating unusable sampling points.

15. A system according to claim 13 further comprising an exclusive area polygon for defining an unwanted sampling area within the study area.

16. A system according to claim 13 further comprising a cluster area polygon for defining a separate frequency sampling from the study area so as to enable complex population cluster sampling.

17. A system according to claim 13 wherein the study area is a polygon.

18. A system according to claim 17 wherein the study area polygon is formed using data entered by a user.

19. A system according to claim 18 wherein the data entered by the user is a list of coordinates.

20. A system according to claim 18 wherein the data entered by the user comprises entries made on a map by the user and further wherein the data comprises digitization of the entries made on the map.

21. A system according to claim 17 wherein the study area polygon is formed using collected data.

22. A system according to claim 13 wherein the first division means, the identification means, the list generator, the second division means, and the selection means are programmed in Java.

23. A method of rapidly assessing a population, the method comprising:

determining a boundary of a study area;

selecting a population estimation methodology for use on the study area;

assigning locations within the study area to field data collectors;

collecting data with the field data collectors;

uploading the collected data to a computer;

preparing a dynamic population estimation/prediction using the computer;

using the dynamic population estimation/prediction to make resource analysis calculations and geographic assignments;

uploading the resource analysis calculations and geographic assignments to the Internet for review by relief organizations throughout the world; and

distributing supplies based on the uploaded resource analysis calculations and geographic assignments.

24. A method according to claim 23 wherein the boundary of the study area is determined by a user entering data.

25. A method according to claim 23 wherein the boundary of the study area is determined by collected data.

26. A method according to claim 23 wherein the population estimation methodology comprises at least one selected from a group consisting of a quadrant method, a T-square method, a point quarter method, and a transect method.

27. A system for rapidly assessing population, the system comprising:

first determination means for determining a boundary of a study area having the population;

selection means for selecting a population estimation methodology for use on the study area;

assignment means for assigning locations within the study area to field data collectors;

collection means for collecting data with the field data collectors;

first transfer means for transferring the collected data to a computer;

second determination means for determining a dynamic population estimation/prediction using the computer;

third determination means for determining resource analysis calculations and geographic assignments based on the dynamic population estimation/prediction;

second transfer means for transferring the resource analysis calculations and geographic assignments to the Internet for review by organizations throughout the world; and

distribution means for distributing supplies based on the resource analysis calculations and geographic assignments.

28. A system according to claim 27 wherein the population estimation methodology comprises at least one selected from a group consisting of a quadrant method, a T-square method, a point quarter method, and a transect method.

29. A method of rapidly assessing population within a study area using an integration of geographic information system (GIS), at least one of satellite imagery and aerial imagery, and a selected population method, the method comprising:

loading the at least one satellite imagery and aerial imagery corresponding to the study area into the GIS;

demarcating dwellings on the satellite imagery loaded into the GIS;

applying a spatially-stratified sampling procedure with a predefined estimate;

simulating a distance measurement procedure based on the selected population estimation method on top of the at least one satellite imagery and aerial imagery;

guiding a user to determine mouse insertion points by display reference lines and points based on the selected population estimation method;

computing distance measurements for the selected population estimation method from the mouse input points;

prompting the user to enter other related information during the procedure to increase productivity for distance measurements and data collection; and

ascertaining an overall population in the study area based on the spatially-stratified sampling procedure.

30. A method according to claim 29 wherein the at least one satellite imagery and aerial imagery comprises high resolution imagery, and further comprising the step of increasing roof-top distance measurements.

31. A method according to claim 29 further comprising capabilities to use and integrate historical data into population computation and prediction.

32.. A method according to claim 29 wherein the spatially-stratified sampling procedure comprises at least one selected from a group consisting of a quadrant method, a T-square method, a point square method, and a transect method.

33. A system for rapidly assessing population within a study area, the system comprising:

a geographic information system (GIS) on a computer;

input means for inputting satellite imagery corresponding with the study area into the GIS;

demarcation means for demarcating dwellings on the satellite imagery loaded into the GIS;

application means for applying a spatially-stratified sampling procedure with a predefined estimate; and

computation means for computing an overall population in the study area based on the spatially-stratified sampling procedure.

34. A system according to claim 33 wherein the spatially-stratified sampling procedure comprises at least one selected from a group consisting of a quadrant method, a T-square method, a point square method, and a transect method.

35. A system according to claim 33 further comprising integration means for integrating geospatial web services for rapid population estimation based on Open GIS Consortium (OGC) specifications.

36. A system according to claim 33 further comprising integration means for integrating Open Geospatial Web services architecture into rapid population estimation system development so as to enable the system to utilize world-wide geospatial information.

37. A system according to claim 33 further comprising population estimation computation across all operating systems, using advanced Java algorithms.

38. A system according to claim 33 further comprising seamless integration means for integrating multiple GPS platforms for rapid population estimation.

39. A system according to claim 38 wherein the multiple GPS platforms comprise at least one chosen from a group consisting of Garmin, Lowrance, Trimble.

40. A method of rapidly assessing population within a study area using a geographic information system (GIS), the method comprising:

loading at least one from a group consisting of satellite imagery and aerial imagery corresponding to the study area into the GIS;

demarcating dwellings on the satellite imagery loaded into the GIS;

applying a spatially-stratifies sampling procedure with a predefined estimate; and

ascertaining an overall population in the study area based on the spatially-stratified sampling procedure.